

CLAIMS:

1. A testing apparatus (200) for testing an electrical device comprising: a housing (130); a rotatable control means (120); an indicator arrangement (110); and a hybrid actuator (100), the hybrid actuator (100) being substantially transparent to allow light from the indicator arrangement (110) to be observed from outside the housing (130), the hybrid actuator (100) being operable to engage with the rotatable control means (120) and whereby to enable rotation about an axis (220);

characterised in that the test apparatus (200) includes:

a rotatable test head (204), which has an engaging portion (202) for engaging a head portion (114) of said hybrid actuator (100);

a light sensing means (210);

a processing means (208) for receiving sensed light data from the light sensing means (210), for receiving performance data from the electrical device and for controlling the movement of the rotatable test head (204); and

a drive means (206) for driving the rotatable test head (204) about the axis (220) in accordance with a control signal (212) generated by the processing means (208).

2. A testing apparatus according to Claim 1, wherein the light sensing means (210) is provided upon the rotatable test head (406).

3. A testing apparatus according to Claim 1, wherein the light sensing means (210) is provided upon the rotational test head, wherein the engaging portion (202) of the rotatable test head (204) engages with a

corresponding receiving recess (102) provided on the head portion (114) and thereby aligns the light sensing means (210) with the hybrid actuator (100).

4. A testing apparatus according to Claim 1, wherein the light sensing means (210) monitors light emitted by the indicator arrangement (110).

5. A testing apparatus according to Claim 1, wherein the electrical device is an inverter, the rotatable control means (120) is a potentiometer and the indicator arrangement (110) is a light emitting diode.

6. A testing apparatus according to Claim 5, wherein the performance data received from the inverter is a sample of the output voltage of the inverter.

7. A method for testing an electrical device comprising: a housing (130); a rotatable control means (120); an indicator arrangement (110); and a hybrid actuator (100), the hybrid actuator (100) being substantially transparent to allow light from the indicator arrangement (110) to be observed from outside the housing (130), engaging with the rotatable control means (120) and rotating about an axis (220);
the method characterised by the steps of:

providing a test apparatus which includes: a rotatable test head (204); a light sensing means (210); a drive means (206); and a processing means (208) for controlling the movement of the rotatable test head (204);

engaging the rotatable test head (204) with a head portion (114) of the hybrid actuator (100);

driving the rotatable test head (204) about the axis (220) into a plurality of different testing positions in accordance with a control signal (212) generated by the processing means (208);

in each of the different testing positions, monitoring performance data (304) for the electrical device;

monitoring the light emanating from the hybrid actuator (100), the light sensing means (210) sensing the light emanating from the hybrid actuator (100) and generating sensed light data (306); and

receiving and processing the sensed light data (306) and the performance data (304) and generating a report of the received data.